

# BookletChart<sup>TM</sup>

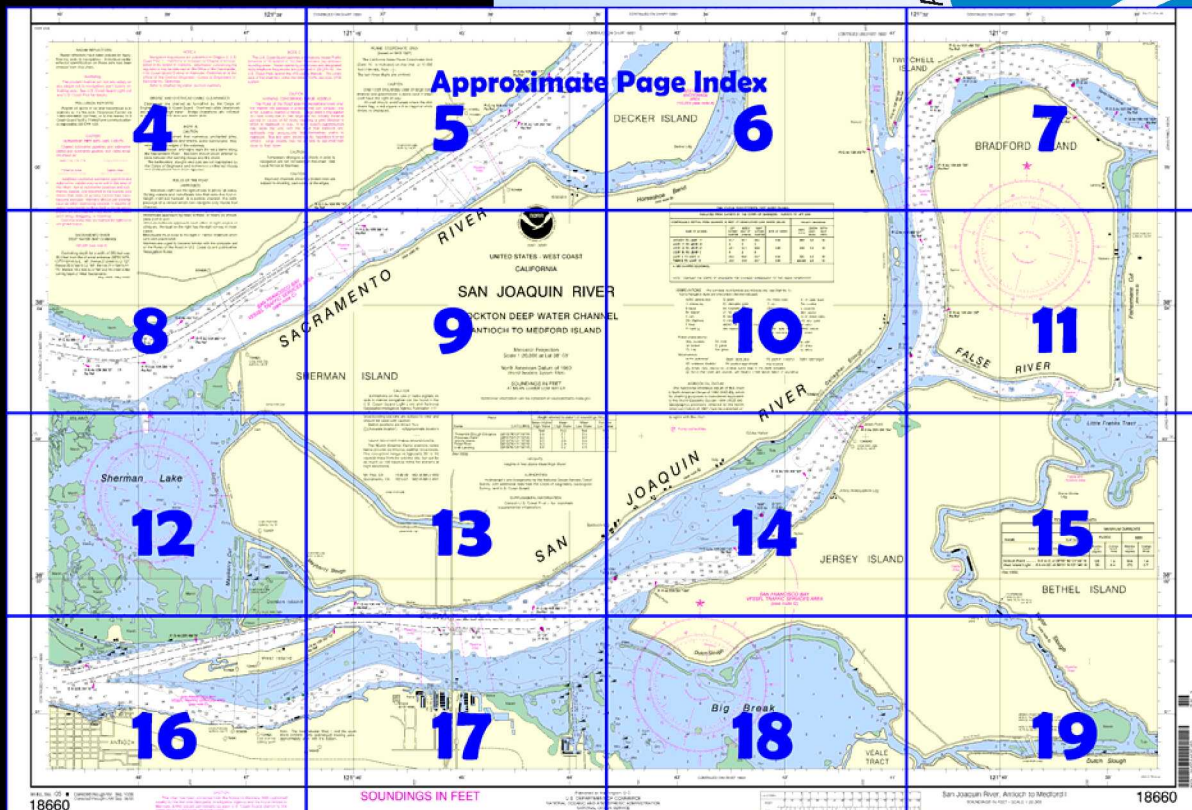
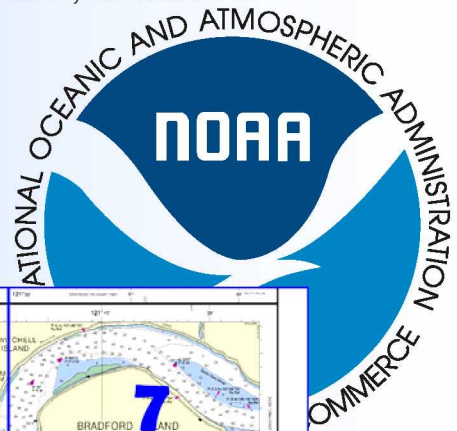
## San Joaquin River – Antioch to Medford Island

(NOAA Chart 18660)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)





### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

### What is a BookletChart™?

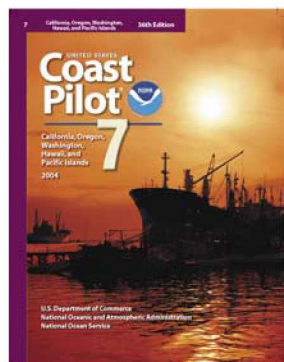
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



### **[Coast Pilot 7, Chapter 7 excerpts]**

(552) The **Delta Region**, the combined deltas of the San Joaquin and Sacramento Rivers, comprises the feeder rivers, sloughs, and canals that directly or indirectly connect with one or both of the rivers. Hundreds of miles of navigable waterways for small boats are available in the Delta; both local and visiting small craft use these waterways extensively. Common types of pleasure craft peculiar to the Delta include pontoon boats and houseboats, but many conventional

powerboats and sailboats use these waters also, especially in summer when San Francisco Bay is foggy and choppy. Some of the more important sloughs are used by tugs and barges.

(553) Bordering the various waterways are levees which are 12 feet or more higher than the land behind them. The levees are built up from

dredged material taken from the adjacent waterway, and because of the settlement of the levees, dredging has been done periodically to keep the tops at height and grade. As material is needed for levee work, the dredge pays more attention to the requirements of the levee than to the depth of the channel for navigation purposes. This leaves an uneven bottom. The tops of the levees generally have dirt roads. **Tule** is often found on the channel side of the levees. Tule is the name given to a tall aquatic plant growth similar to bulrush.

(554) Many public and private small-boat harbors, marinas, and boating resorts are spread over the Delta region. All types of facilities and services for small craft are available, though some areas in the Delta are much more developed than others. Groceries are one of the most difficult items to obtain in this region; groceries in any quantity must be obtained from the larger towns on the Sacramento River, at Antioch or Stockton on the San Joaquin River, or at one of the larger resorts. Diesel oil is similarly rather scarce, since most craft on these waters use gasoline. Diesel oil may be obtained at the junction of the Mokelumne and San Joaquin Rivers, on the W side of King Island, at or near the cities of Antioch and Stockton, and at Bethel Island.

(555) Some areas in the Delta in which small-craft facilities are especially concentrated are: most of the perimeter of **Bethel Island**, 3.4 miles E from Antioch Bridge; the S side of San Joaquin River on both sides of Antioch Bridge; the W side of the Mokelumne River from its junction with the San Joaquin River to Georgiana Slough; and the San Joaquin River from Fourteenmile Slough through Stockton.

(556) The Sacramento and San Joaquin Rivers, including some of the feeder rivers, sloughs, and canals that directly or indirectly connect with one or both of the rivers, are crossed by cable ferries. These ferries in the delta region are guided by cables and sometimes propelled by a cable rig attached to the shore. Cables to the ferries, which extend from both banks of the waterway, may be at, near, or above the water surface. Operating procedures vary and mariners are advised to use extreme caution and seek local knowledge. In 1978, the U.S. Coast Guard advised that cable ferries were not operating in many charted locations in the delta region. These ferries may operate intermittently, so caution is advised while operating in their vicinity. **DO NOT ATTEMPT TO PASS A MOVING CABLE FERRY.**

(557) Bridge clearances on the Sacramento River above Rio Vista and on other waterways in the delta region are at low water, which is **mean lower low water at low-river stage**; power cable clearances are at high water. Mariners are cautioned, during flood stage levels, bridge and overhead cable clearances may be reduced 29 feet or more.

(558) **San Joaquin River** rises in the Sierra Nevada, flows 275 miles in a W direction, and enters Suisun Bay through **New York Slough**. The winding river is navigable for deep-draft vessels to Stockton. The water is generally fresh at Antioch. The mean range of tide is about 3 feet from the entrance to Stockton. Major floods in the river valley may occur from November to April, caused by intense general storms of several days' duration. At the mouth of the river an ordinary flood will cause a rise of 8 feet and an extreme flood a rise of 10 feet in the river level. At Stockton, ordinary flood will cause a rise of 8.5 feet, and extreme flood a rise of 13.5 feet in the river level. The delta of the river is formed of many marshy islands intersected by sloughs and channels. The islands are reclaimed tule and cattail marshes which have been converted to agriculture. Bordering the river are levees that are 12 feet or more higher than the land behind them.

# Table of Selected Chart Notes

## Pump-out facilities

Corrected through NM Sep. 10/05  
Corrected through LNM Sep. 06/05

### HEIGHTS

Heights in feet above Mean High Water.

### WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

### CAUTION

Small craft should stay clear of large commercial and government vessels even if small craft have the right-of-way.  
All craft should avoid areas where the skin divers flag, a red square with a diagonal white stripe, is displayed.

### PLANE COORDINATE GRID

(based on NAD 1927)

The California State Plane Coordinate Grid (Zone 11) is indicated on this chart at 10,000 foot intervals, thus: --+--  
The last three digits are omitted.

### CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

### SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

### RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.268" southward and 3.833" westward to agree with this chart.

### CAUTION

#### SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

### POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

### CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

### NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Mt. Pise, CA	KHB-49	162.40 MHz WX2
Sacramento, CA	KEC-57	162.55 MHz WX1

### CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○(Accurate location)    ◐(Approximate location)

### NOTE B

#### CAUTION

Mariners are warned that numerous uncharted piles, snags, pumps, pipes and wrecks, some submerged, may exist along the edges of the waterway.

Numerous buoys and signs mark the wing dams along the Sacramento River. Mariners should never attempt to pass between the warning buoys and the shore.

The backwaters, sloughs and cuts are not maintained by the Corps of Engineers and numerous uncharted shoals and obstructions have been reported.

### NOTE C

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the San Francisco Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. The entire area of the chart falls within the Vessel Traffic Services (VTS) system.

### NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the office of the District Engineer, Corps of Engineers in Sacramento, California.

Refer to charted regulation section numbers.

### RULES OF THE ROAD

#### (ABRIDGED)

Motorless craft have the right-of-way in almost all cases. Sailing vessels and motorboats less than sixty-five feet in length shall not hamper, in a narrow channel, the safe passage of a vessel which can navigate only inside that channel.

A motorboat being overtaken has the right-of-way.

Motorboats approaching head to head or nearly so should pass port to port.  
When motorboats approach each other at right angles or obliquely, the boat on the right has the right-of-way in most cases.

Motorboats must keep to the right in narrow channels when safe and practicable.

Mariners are urged to become familiar with the complete text of the Rules of the Road in U.S. Coast Guard publication "Navigation Rules."

### CAUTION

#### WARNING CONCERNING LARGE VESSELS

The "Rules of the Road" state that recreational boats shall not impede the passage of a vessel that can navigate only within a narrow channel or fairway. Large vessels may appear to move slowly due to their large size but actually transit at speeds in excess of 12 knots, requiring a great distance in which to maneuver or stop. A large vessel's superstructure may block the wind with the result that sailboats and sailboards may unexpectedly find themselves unable to maneuver. Bow and stern waves can be hazardous to small vessels. Large vessels may not be able to see small craft close to their bows.

### BRIDGE AND OVERHEAD CABLE CLEARANCES

Clearances are charted as furnished by the Corps of Engineers and U. S. Coast Guard. Overhead cable clearances are referred to high water. Bridge clearances are referred to High Water (HW) and Low Water (LW).

### AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

### SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

### CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

### ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

#### Bottom characteristics:

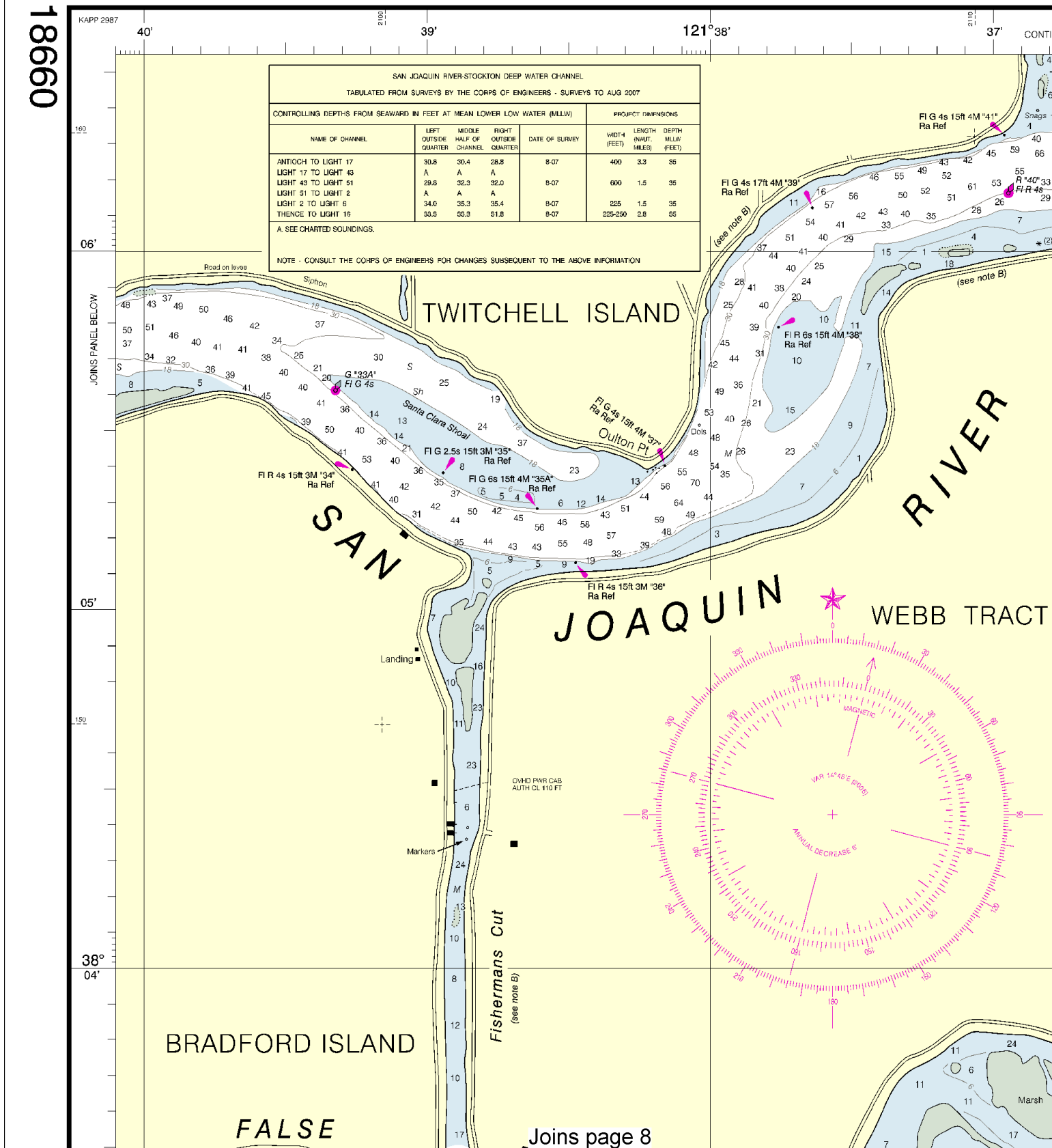
Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

#### Miscellaneous:

AUTH authorized	Obstrn obstruction	PD position doubtful	Subtm submerged
ED existence doubtful	PA position approximate	Rep reported	
(1) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

18660

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-6 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, <http://NauticalCharts.gov>, [help@NauticalCharts.gov](mailto:help@NauticalCharts.gov), or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or [help@OceanGrafix.com](mailto:help@OceanGrafix.com).



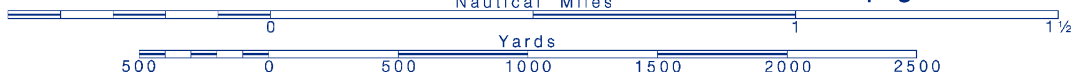
4



Printed at reduced scale.

SCALE 1:20,000  
Nautical Miles

See Note on page 5.





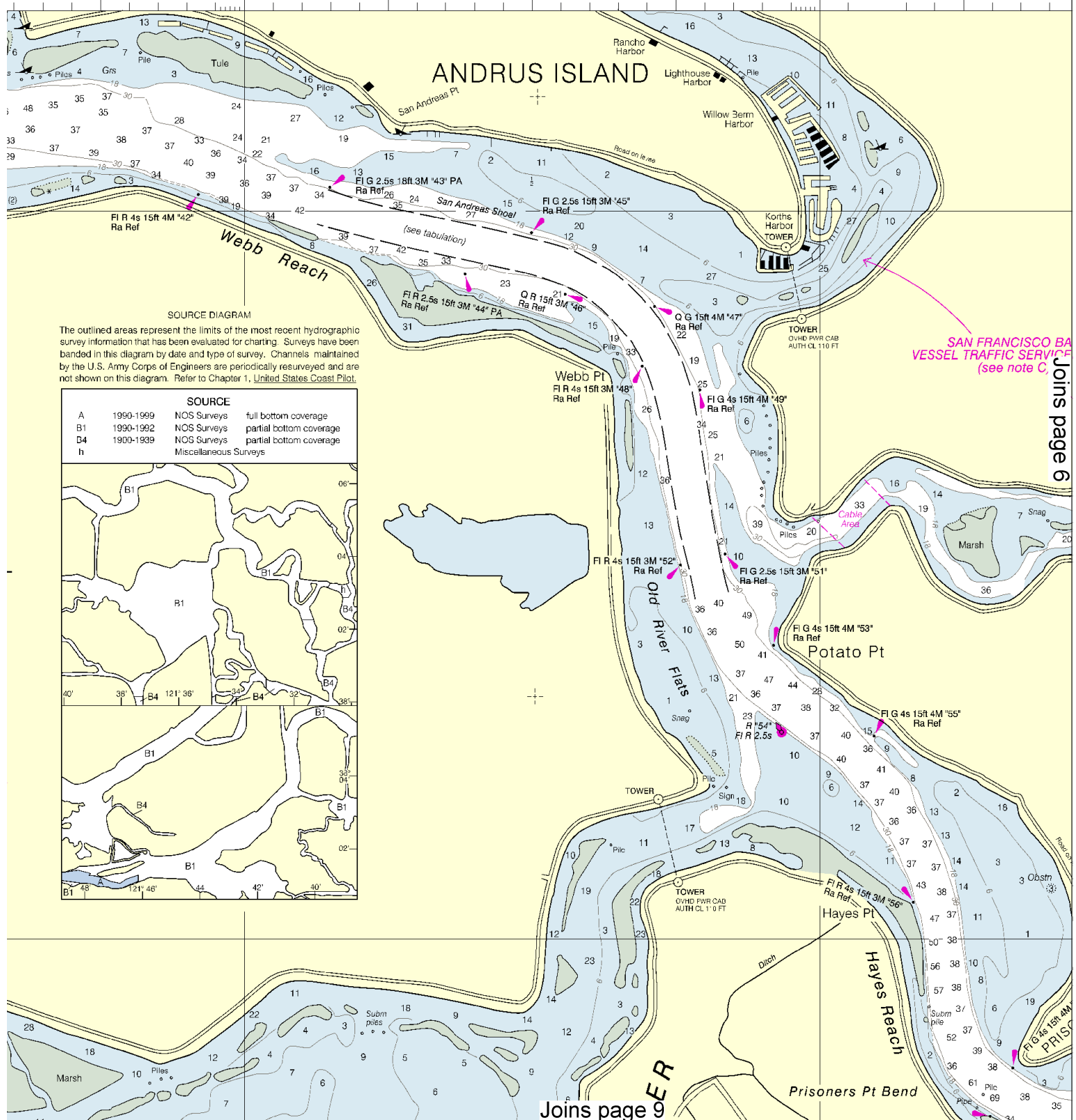
CONTINUED ON CHART 18661

36'

35'

CONTINUED ON CHART 18661

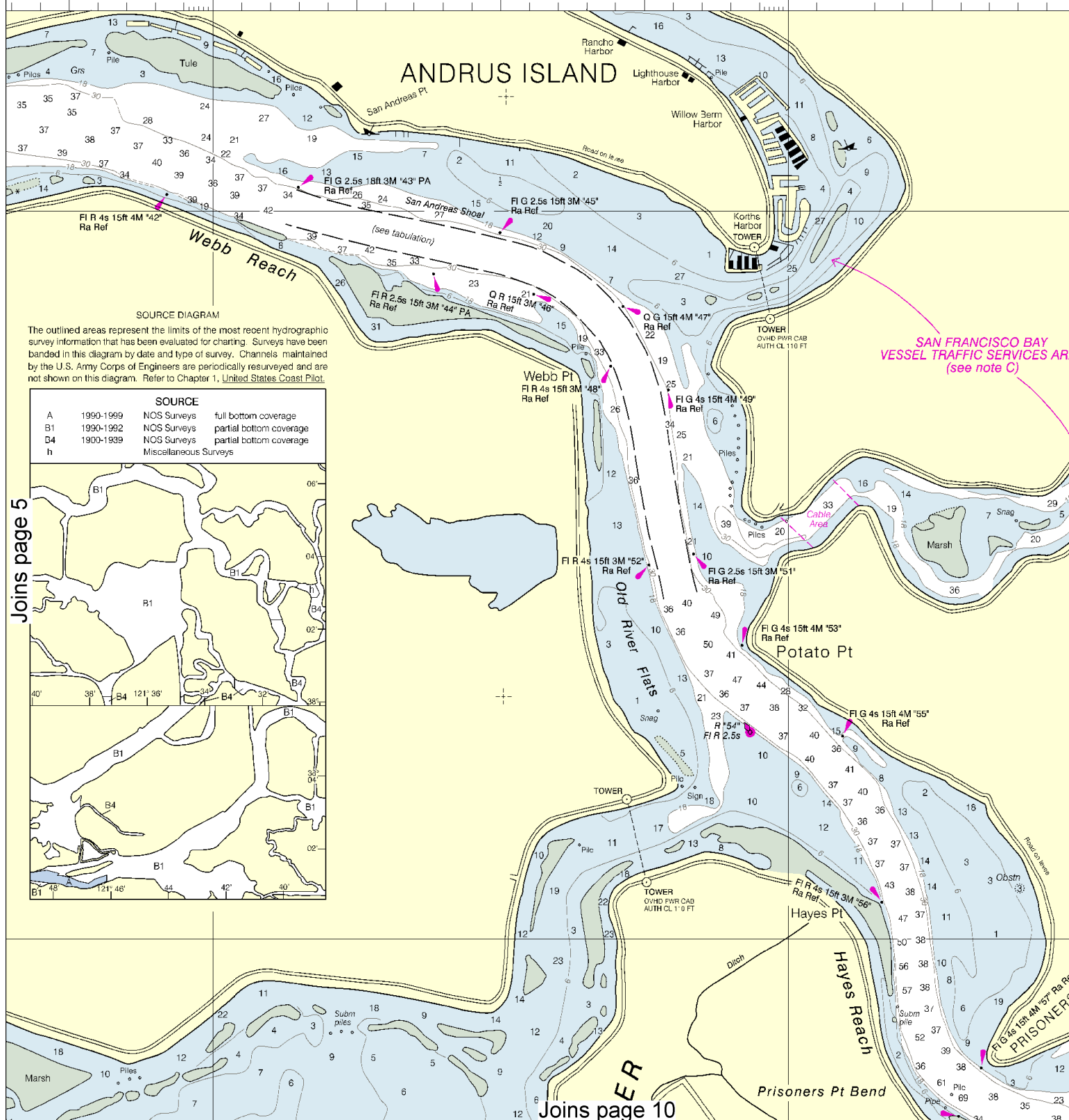
34'



This BookletChart was reduced to 75% of the original chart scale.  
 The new scale is 1:26667. Barscales have also been reduced and  
 are accurate when used to measure distances in this BookletChart.

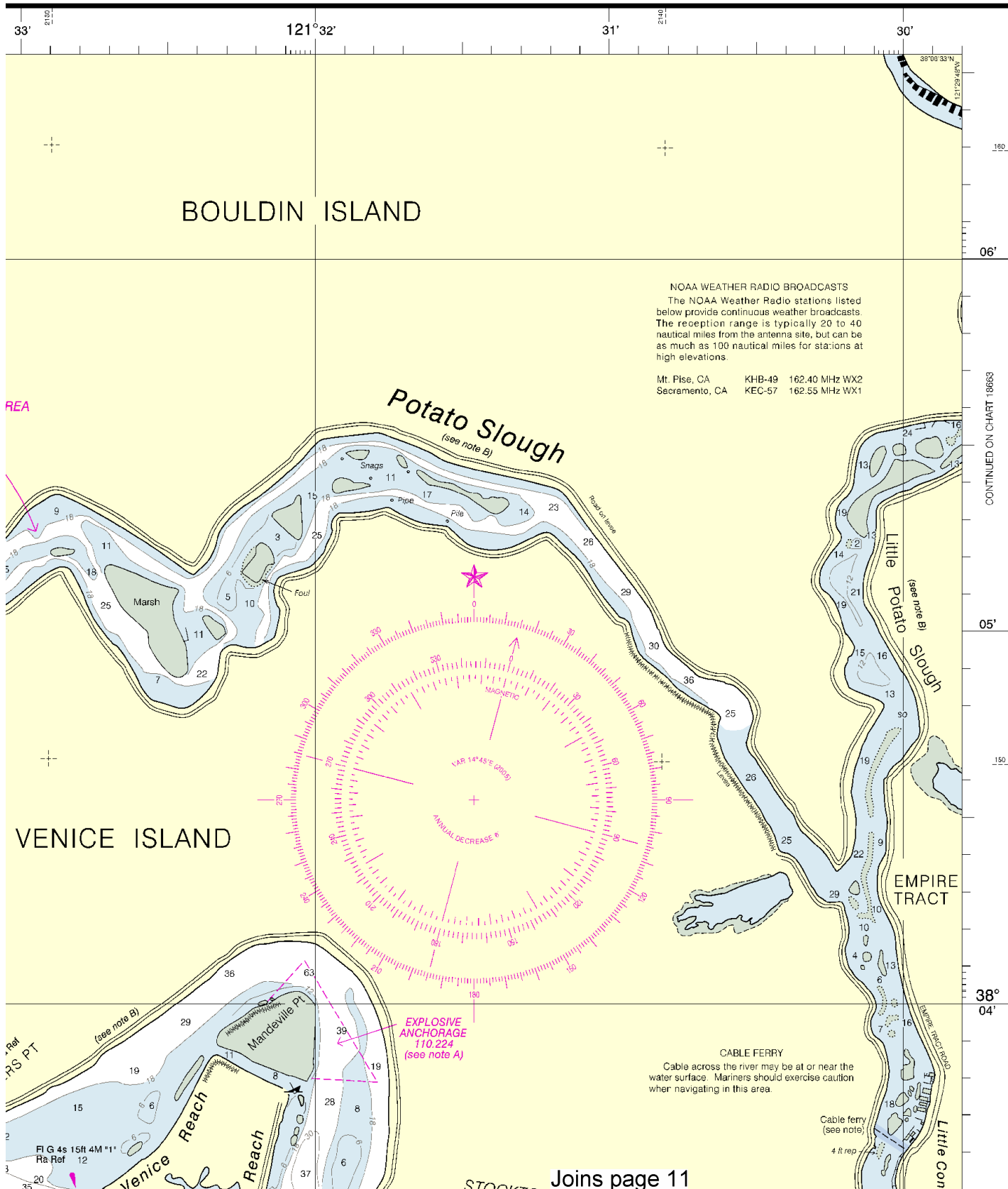
ON CHART 18661

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# SOUNDINGS IN FEET

18660



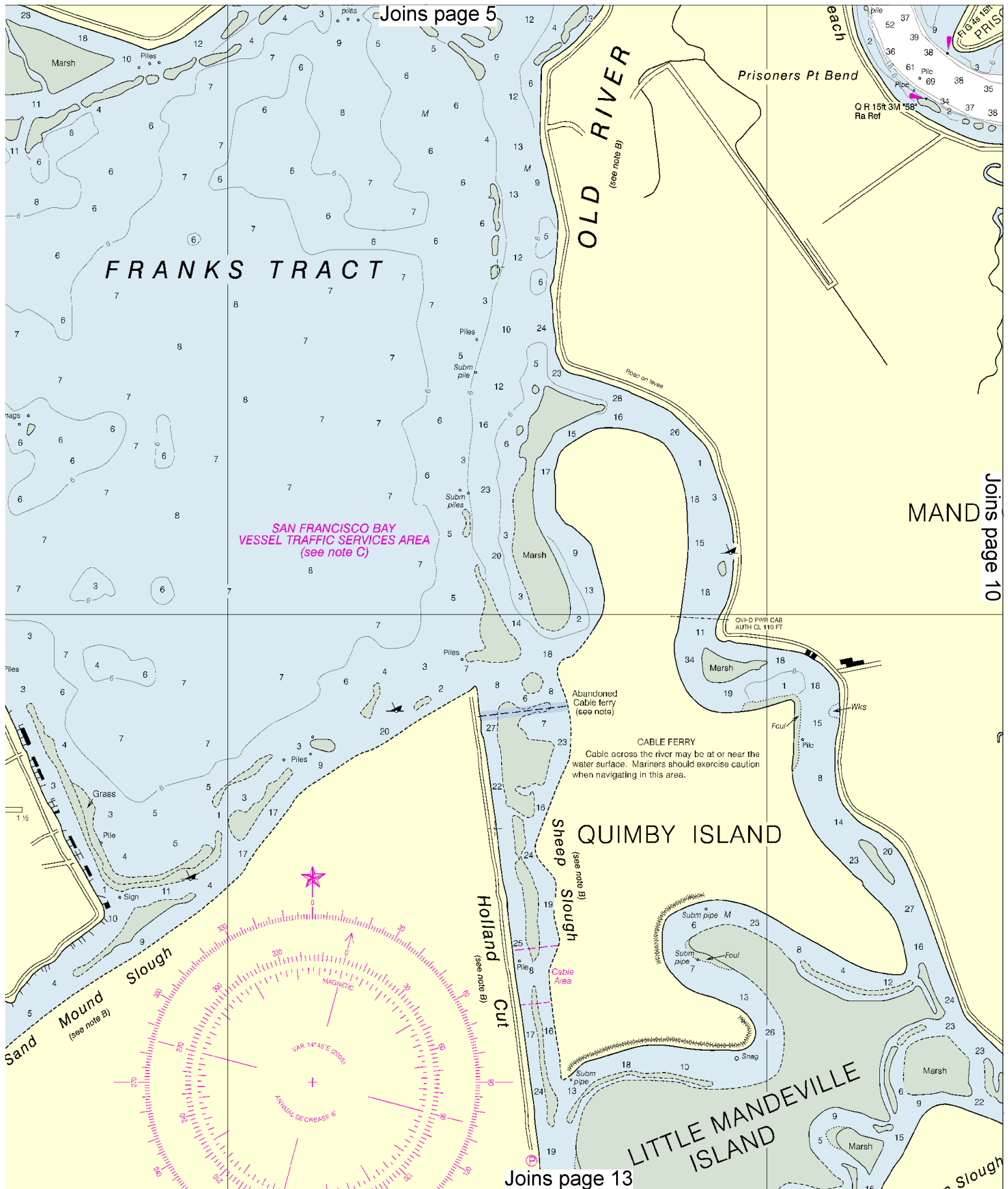
Joins page 11

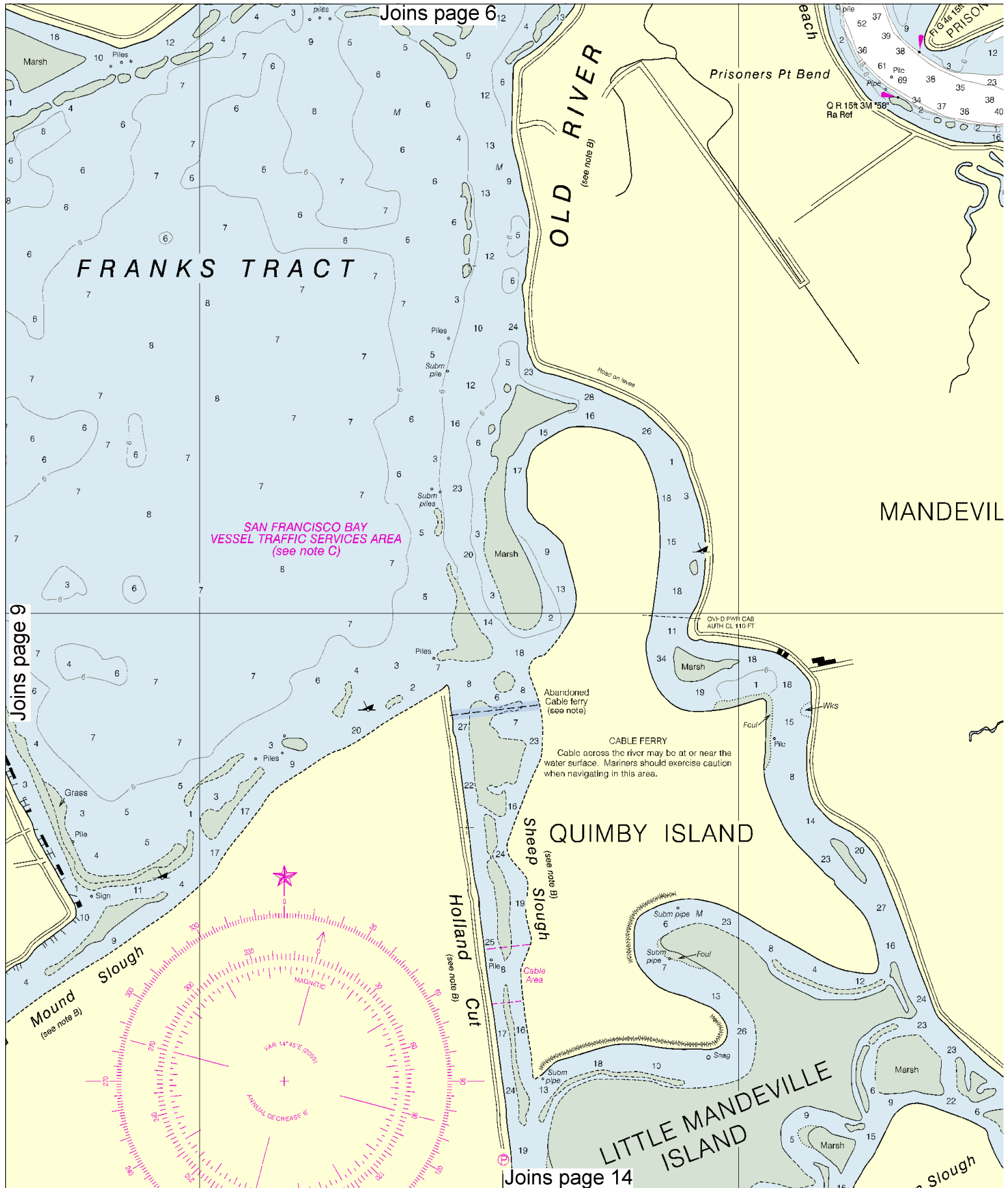
This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0510 2/2/2010,  
 NGA Weekly Notice to Mariners: 0910 2/27/2010,  
 Canadian Coast Guard Notice to Mariners: n/a .

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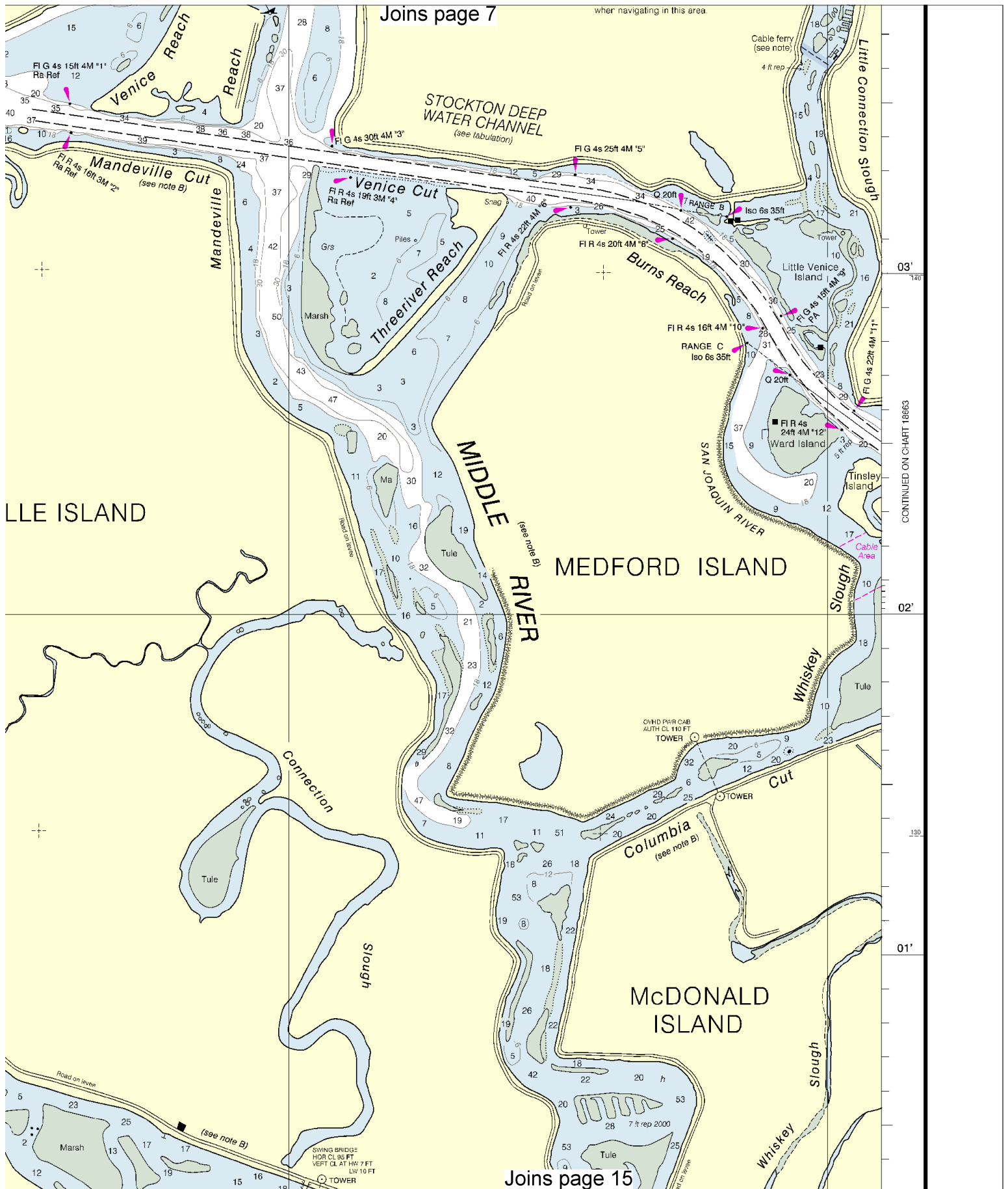


Printed at reduced scale.

SCALE 1:20,000  
Nautical Miles

See Note on page 5.





CONTINUED ON CHART 18863

130'

11



# VEALE TRACT

HOLLAND

38° 00'

121° 40' 05" W

37° 59' 54" N

40'

39'

121° 38'

CONTINUED ON CHART 18661

37'

KAPP 2988

48'

47'

121° 46'

## RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

## WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

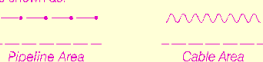
## POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

## CAUTION

### SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



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Covered wells may be marked by lighted or unlighted buoys.

## SACRAMENTO RIVER DEEP WATER SHIP CHANNEL

162.205 (see note A)

Controlling depth for a width of 200 feet was 26.0 feet from the channel entrance (38°03'46.7"N, 121°51'17"W) to Lt. "40", thence 27.6 feet to Lt. "52", thence 30.9 feet to Lt. "60", thence 27.5 feet to Lt. "70", thence 18.4 feet to Lt. "86" and 29.4 feet in the turning basin at West Sacramento.

May 2005 - May 2006

## NOTE A

Navigate on regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 11th Coast Guard District in Alameda, California or at the office of the District Engineer, Corps of Engineers in Sacramento, California.

Refer to charted regulation section numbers.

## BRIDGE AND OVERHEAD CABLE CLEARANCES

Clearances are charted as furnished by the Corps of Engineers and U. S. Coast Guard. Overhead cable clearances are referred to high water. Bridge clearances are referred to High Water (HW) and Low Water (LW).

## NOTE B

### CAUTION

Mariners are warned that numerous uncharted piles, snags, pumps, pipes and wrecks, some submerged, may exist along the edges of the waterway.

Numerous buoys and signs mark the wing dams along the Sacramento River. Mariners should never attempt to pass between the warning buoys and the shore.

The backwaters, sloughs and cuts are not maintained by the Corps of Engineers and numerous uncharted shoals and obstructions have been reported.

## RULES OF THE ROAD

### (ABRIDGED)

Motorless craft have the right-of-way in almost all cases. Sailing vessels and motorboats less than sixty-five feet in length shall not hamper, in a narrow channel, the safe passage of a vessel which can navigate only inside that channel.

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Motorboats approaching head to head or nearly so should pass port to port.

When motorboats approach each other at right angles or obliquely, the boat on the right has the right-of-way in most cases.

Motorboats must keep to the right in narrow channels when safe and practicable.

Mariners are urged to become familiar with the complete text of the Rules of the Road in U.S. Coast Guard publication "Navigation Rules."

## NOTE C

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the San Francisco Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. The entire area of the chart falls within the Vessel Traffic Services (VTS) system.

## CAUTION

### WARNING CONCERNING LARGE VESSELS

The "Rules of the Road" state that recreational boats shall not impede the passage of a vessel that can navigate only within a narrow channel or fairway. Large vessels may appear to move slowly due to their large size but actually transit at speeds in excess of 12 knots, requiring a great distance in which to maneuver or stop. A large vessel's superstructure may block the wind with the result that sailboats and sailboards may unexpectedly find themselves unable to maneuver. Bow and stern waves can be hazardous to small vessels. Large vessels may not be able to see small craft close to their bows.

## CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

## CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

## PLANE COORDINATE

(based on NAD 11)

The California State Plane (Zone 11) is indicated on this foot intervals, thus: - - - - - The last three digits are omitted.

## CAUTION

Small craft should stay clear of commercial and government vessels.

All craft should avoid area divers flag, a red square with stripe, is displayed.

CHART AUTHORITY

05'

150'

38° 04'

CONTINUED ON CHART 18659

TOWER

CHARTED PWP CABLE AUTH CL 125 FT

Wreckage

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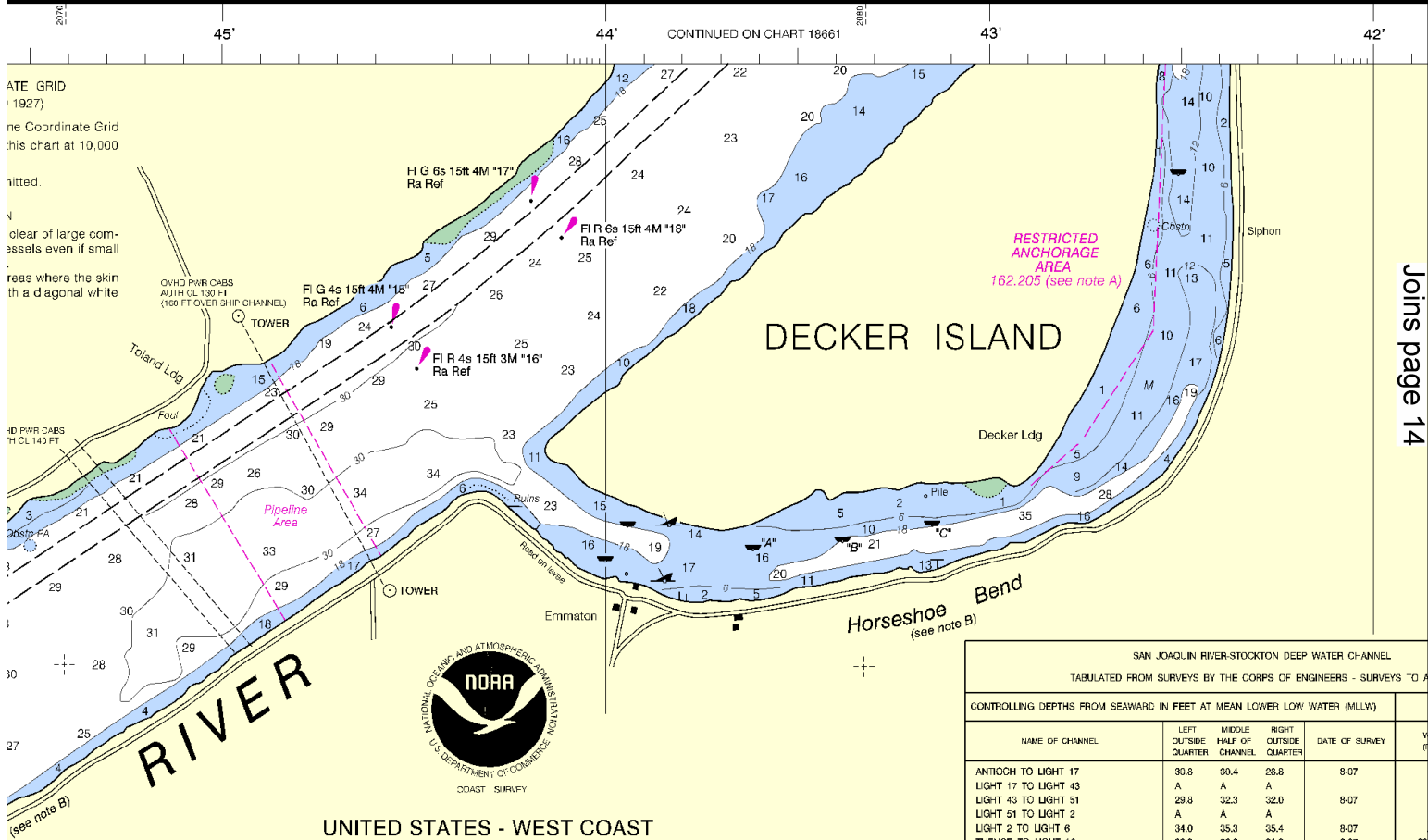
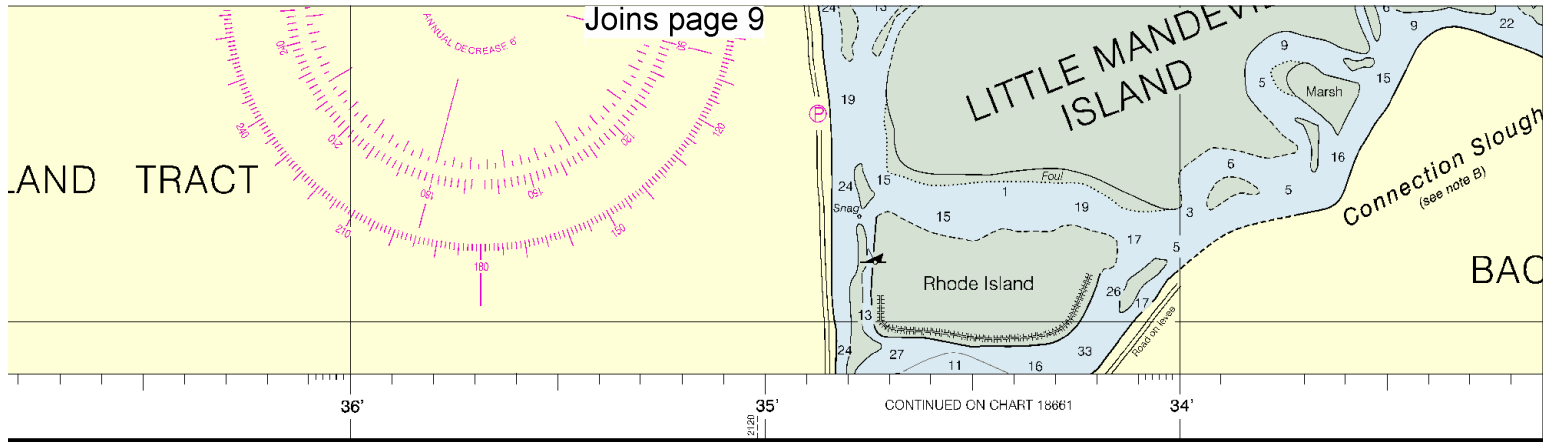
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# SAN JOAQUIN RIVER

## STOCKTON DEEP WATER CHANNEL

### ANTIOCH TO MEDFORD ISLAND

Mercator Projection  
Scale 1:20,000 at Lat 38° 03'  
North American Datum of 1983  
(World Geodetic System 1984)

SOUNDINGS IN FEET

SAN JOAQUIN RIVER-STOCKTON DEEP WATER CHANNEL				
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO A				
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY
ANTIOCH TO LIGHT 17	30.8	30.4	28.8	8-07
LIGHT 17 TO LIGHT 43	A	A	A	
LIGHT 43 TO LIGHT 51	29.8	32.3	32.0	8-07
LIGHT 51 TO LIGHT 2	A	A	A	
LIGHT 2 TO LIGHT 6	34.0	35.3	35.4	8-07
THENCE TO LIGHT 16	33.3	33.3	31.8	8-07
A. SEE CHARTED SOUNDINGS				
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFO				

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)  
Aids to Navigation (lights are white unless otherwise indicated):

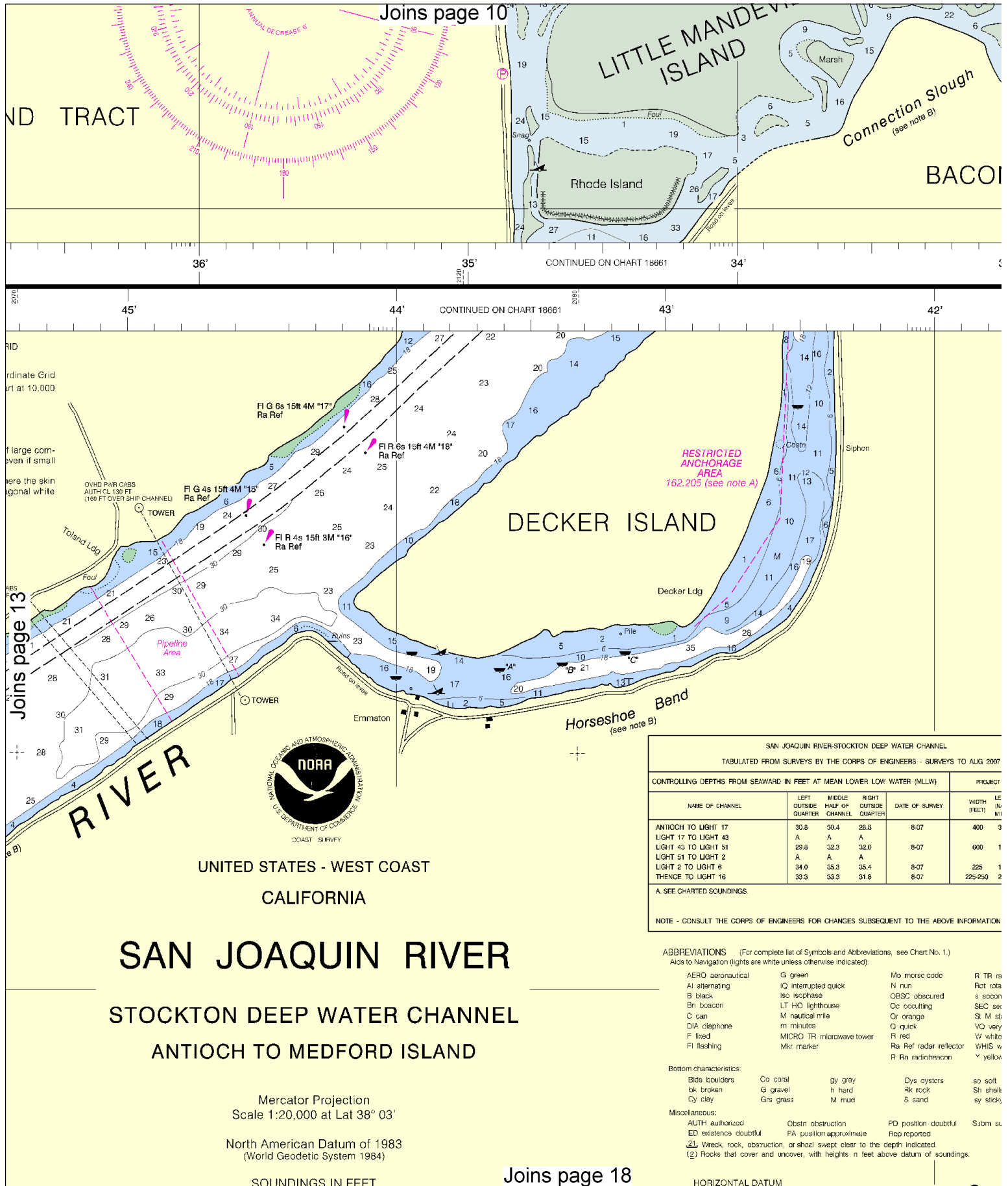
AERO aeronautical	G green	Mo micro code
Al alternating	IQ interrupted quick	N nun
B black	iso isophase	OBSC obscured
Bn beacon	LT HO lighthouse	Oc occulting
C can	M nautical mile	Or orange
DIA diaphone	m minutes	Q quick
F fixed	MICRO TR microwave tower	R red
FI flashing	Mkr marker	Ra Ref radar reflector
		Rn radinbeacon

Bottom characteristics:	Co coral	gy gray	Oys oysters
bk boulders	G gravel	h hard	Rk rock
clay	Gns grass	M mud	S sand

Miscellaneous:  
AUTH authorized Obstr obstruction PD position doubtful  
ED existence doubtful PA position approximate Rep reported  
(2) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.  
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

Joins page 17

HORIZONTAL DATUM



14



Printed at reduced scale.

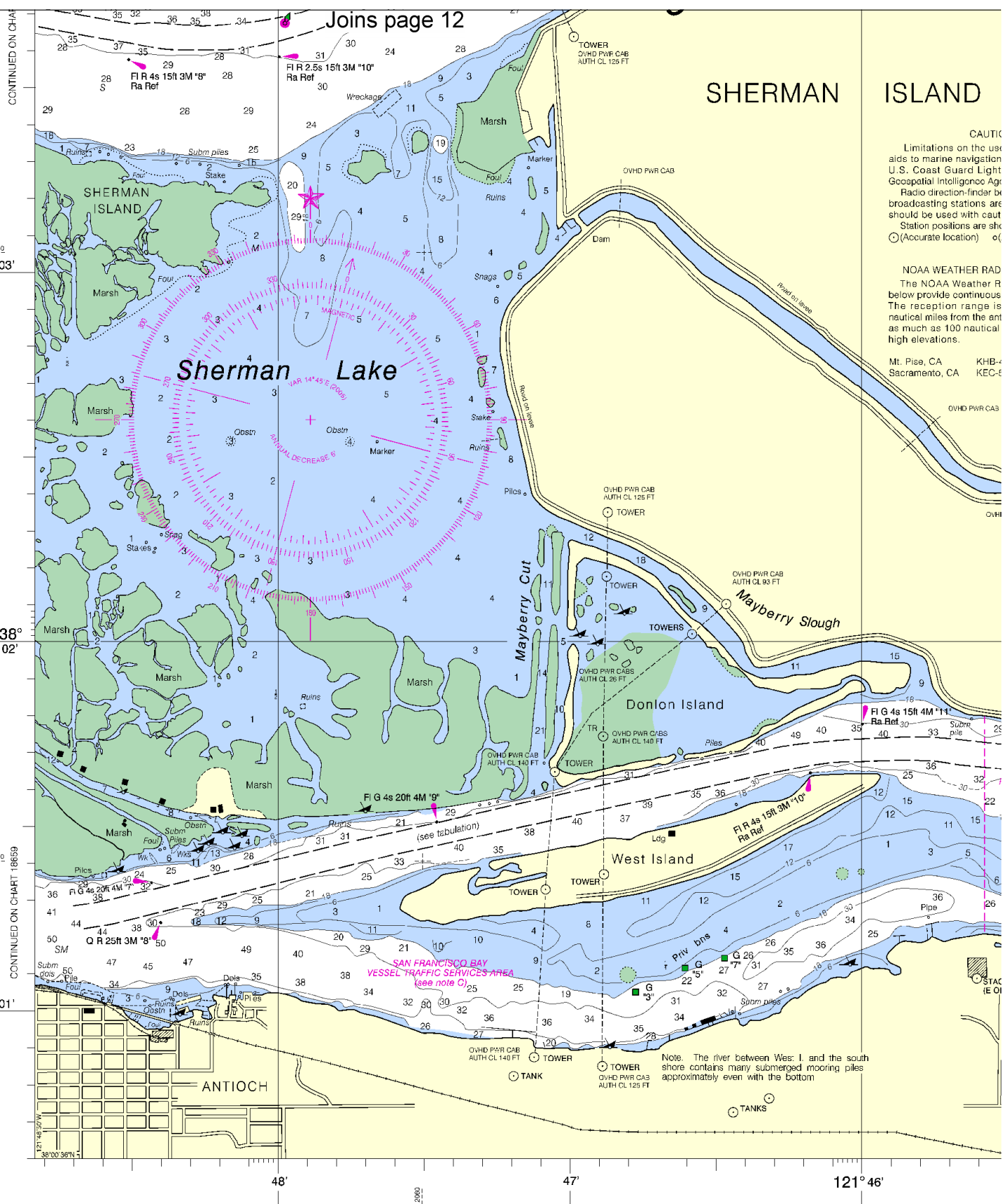
SCALE 1:20,000  
Nautical Miles

See Note on page 5.









3rd Ed., Sep. /05  
18660  
Corrected through NM Sep. 10/05  
Corrected through LNM Sep. 06/05

CAUTION  
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

SOUNDI

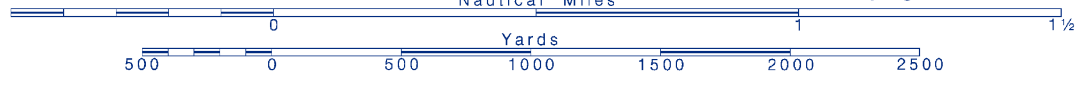
16



Printed at reduced scale.

SCALE 1:20,000  
Nautical Miles

See Note on page 5.



North American Datum of 1983  
(World Geodetic System 1984)

SOUNDINGS IN FEET  
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

**TIDAL INFORMATION**  
Use of radio signals as shown can be found in the List of Radio Signals and National Agency Publication 117. Bearings to commercial are subject to error and caution.  
shown thus:  
o (Approximate location)  
+  
**RADIO BROADCASTS**  
Radio stations listed as weather broadcasts are typically 20 to 40 antenna site, but can be at miles for stations at

Place	Name	(LAT/LONG)	Height referred to datum of soundings (MLLW)			
			Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
			feet	feet	feet	feet
Threemile Slough Entrance	(38°05'N/121°41'W)		3.6	3.1	0.5	-1.5
Prisoners Point	(38°04'N/ 21°33'W)		3.5	3.1	0.5	-1.5
Wards Island	(38°03'N/ 21°30'W)		3.5	3.0	0.4	-1.5
False River	(38°03'N/ 21°39'W)		3.3	2.9	0.5	-1.5
Irish Landing	(38°02'N/ 21°35'W)		3.6	3.2	0.5	-1.5

(Mar 2003)

**HEIGHTS**  
Heights in feet above Mean High Water.

**AUTHORITIES**  
Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

**SUPPLEMENTAL INFORMATION**  
Consult U.S. Coast Pilot 7 for important supplemental information.

bk broken  
Cy clay  
G gravel  
Grs grass  
H hard  
M mud  
Rk rock  
S sand  
Miscellaneous:  
AUTH authorized  
ED existence doubtful  
Obstr obstruction  
PA position approximate  
PD position doubtful  
Rep reported  
Wreck, rock, obstruction, or shoal swept clear to the depth indicated.  
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

**HORIZONTAL DATUM**  
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.28" southward and 3.33" westward to agree with this chart.

B-49 162.40 MHz WX2  
C-57 162.55 MHz WX1

AS

VHD PIPELINE

Ramp  
TACK OF NINE

45'

44'

2000

43'

CONTINUED ON CHART 18661

42'

INGS IN FEET

Published at Washington, D.C.  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
COAST SURVEY

FATHOMS	1	2
FEET	6	12
METERS	1	2



Mercator Projection Joins page 14  
Scale 1:20,000 at Lat 38° 03'

North American Datum of 1983  
(World Geodetic System 1984)

SOUNDINGS IN FEET  
AT MEAN LOWER LOW WATER

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov).

#### TIDAL INFORMATION

Place	Name	(LAT/LONG)	Height referred to datum of soundings (MLLW)			
			Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
Three Mile Slough Entrance		(38°05'N/121°41'W)	feet	feet	feet	feet
Prisoners Point		(38°04'N/ 21°33'W)	3.6	3.1	0.5	-1.5
Wards Island		(38°03'N/ 21°30'W)	3.5	3.1	0.5	-1.5
False River		(38°03'N/21°39'W)	3.5	3.0	0.4	-1.5
Irish Landing		(38°02'N/21°35'W)	3.3	2.9	0.5	-1.5

(Mar 2003)

#### HEIGHTS

Heights in feet above Mean High Water.

#### AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

#### SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

bk broken G. gravel n. hard R. rock S. shell  
Cy clay Gs. grass M. mud S. sand sy. stick  
Miscellaneous:  
AUTH. authorized Obstr. obstruction PD. position doubtful SJ. sm. s.  
ED. existence doubtful PA. position approximate Rep. reported  
Wk. wreck, rock, obstruction, or shoal swept clear to the depth indicated.  
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

#### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.285" southward and 3.833" westward to agree with this chart.

radio signals as  
be found in the  
s and National  
Publication 117  
be to commercial  
ject to error and

us:  
ximate location)

#### ROADCASTS

stations listed  
ther broadcasts  
ically 20 to 40  
site, but can be  
s for stations at

62.40 MHz WX2  
62.55 MHz WX1

Joins page 17

IGS IN FEET

18



Printed at reduced scale.

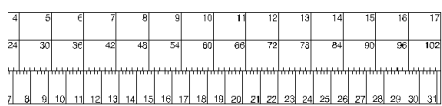
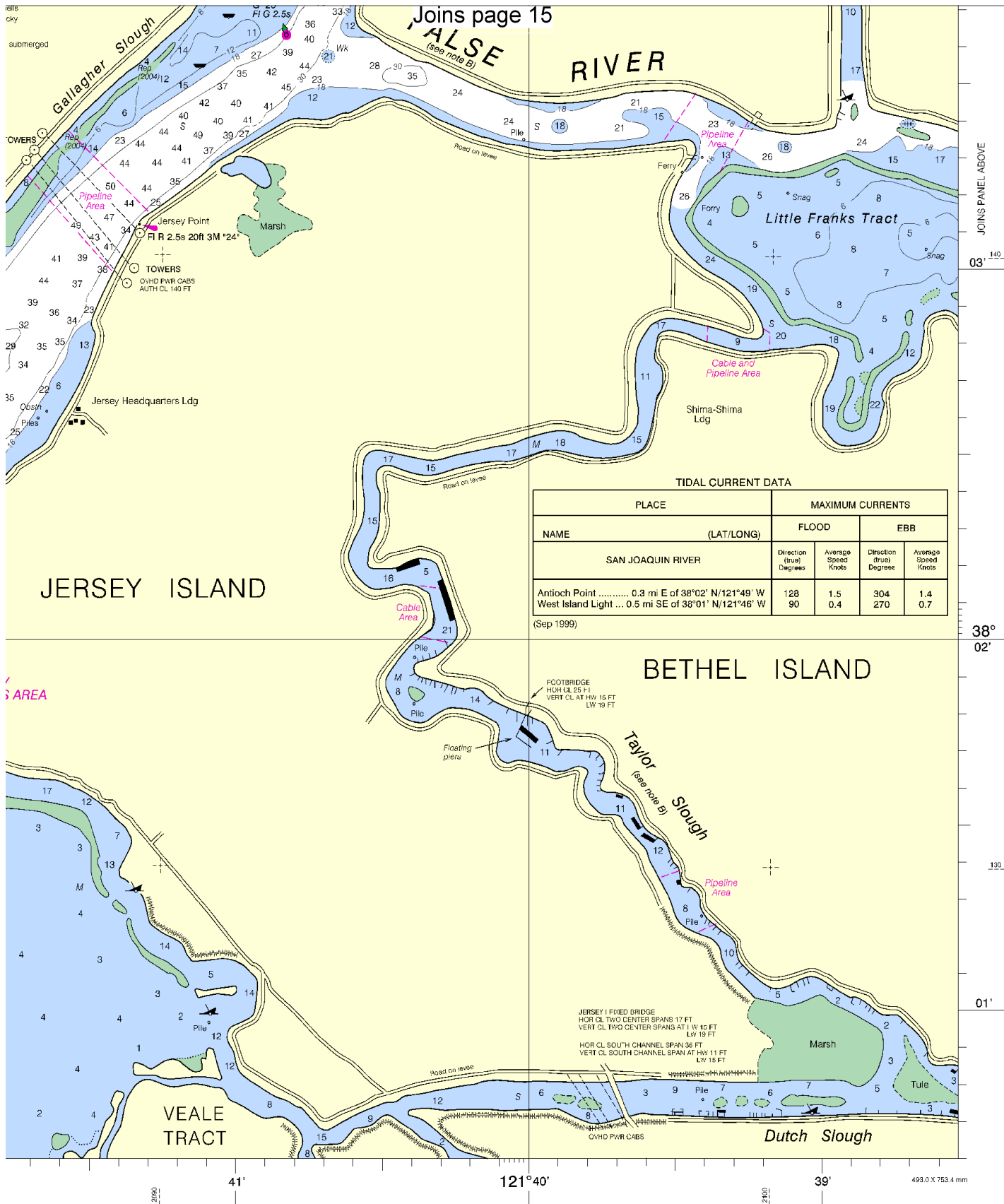
SCALE 1:20,000  
Nautical Miles

See Note on page 5.



Published at Washington, D.C.  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
COAST SURVEY

FATHOMS	1	2	3	4
FEET	6	12	18	24
METERS	1	2	3	4



San Joaquin River, Antioch to Medford I  
SOUNDINGS IN FEET - SCALE 1:20,000

18660

## EMERGENCY INFORMATION

### VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

**Channel 16 – Emergency, distress and safety calls** to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

**Channels 68, 69, 71, 72 & 78A** – Recreational boat channels.

### Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

### **HAVE ALL PERSONS PUT ON LIFE JACKETS !!**

**Mobile Phones** – Call 911 for water rescue.

**Coast Guard Search & Rescue** – 510-437-3700

**Coast Guard San Francisco** – 415-399-3479

**Commercial Vessel Assistance** – 1-800-367-8222

**NOAA Weather Radio** – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

**Getting and Giving Help** – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



## NOAA CHARTING PUBLICATIONS

**Official NOAA Nautical Charts** – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official Print-on-Demand Nautical Charts** – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at [www.OceanGrafix.com](http://www.OceanGrafix.com).

**Official Electronic Navigational Charts (NOAA ENC<sup>®</sup>)** – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official Raster Navigational Charts (NOAA RNC<sup>™</sup>)** – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official BookletCharts<sup>™</sup>** – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is [www.NauticalCharts.gov/bookletcharts](http://www.NauticalCharts.gov/bookletcharts).

**Official PocketCharts<sup>™</sup>** – PocketCharts<sup>™</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

**Official U.S. Coast Pilot<sup>®</sup>** – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov).

**Official On-Line Chart Viewer** – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is [www.NauticalCharts.gov/viewer](http://www.NauticalCharts.gov/viewer).

**Official Nautical Chart Catalogs** – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

**Internet Sites:** [www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov), [www.NOAA.gov](http://www.NOAA.gov), [www.TidesandCurrents.NOAA.gov](http://www.TidesandCurrents.NOAA.gov), [www.NOS.NOAA.gov](http://www.NOS.NOAA.gov).